ROKU™

SoundBridge Network Music Player

User Guide | Software v2.3

Welcome

Thanks for purchasing Roku SoundBridge! We hope you enjoy using it as much as we've enjoyed creating it.

SoundBridge lets you play music you have stored on your PC or Mac anywhere in your home. It also lets you access many of the thousands of Internet radio stations that broadcast on the web without turning on your computer. Enjoy!

Run the Latest Software!

Roku's media players are designed to be upgradeable in the field, and we are always working on improving the software for our products. Your SoundBridge has a menu option to check for, and automatically install, software updates. We recommend you try this as soon as your system is set up to make sure you have the latest software. You can do it from the comfort of your couch, using the SoundBridge remote control. All you need is an active Internet connection. See "Checking for the Latest Software" on page 14 for easy instructions.

Register Your SoundBridge!

It's quick, easy and allows you to receive the latest software updates for SoundBridge. Of course, we won't share your personal information with anyone else.

Download the Latest User Guide!

When our software changes, so does our user guide. Visit www.rokulabs.com/support to download the latest version as a PDF document to learn about the latest features.

Visit **www.rokulabs.com/support** to register your SoundBridge.

TABLE OF CONTENTS

Getting Started

I. Music Server Software Requirements 3
II. Hooking Up Your Home Network Hardware (Wired Ethernet or Wireless) 7
III. Hooking Up Your Speakers or Stereo System ... 7
IV. Connecting SoundBridge to AC Power 9
V. Using Your Remote Control 9
VI. Establishing a Network Connection 10
VII. Enabling Music Sharing 12
VIII. Choosing Your Music Library 13
IX. Playing Music 14
X. Setting Display Preferences (optional) 14
XI. Checking for the Latest Software (recommended) 14
XII. Wall or Under-Cabinet Mounting (optional) ... 15

Music Playback — Overview

Audio File Formats Supported 16
Navigation Quick Reference 16
Screen Icons Quick Reference 17

Music Playback — Tutorial

The Home Menu 18
Browsing by Album 19
Building a Song Queue 20
Reviewing a Song Queue 22
Erasing a Song Queue 23
Repeat and Shuffle 23
Pausing Music Playback 23
Skipping Tracks During Playback 24
Playing a Playlist 24
Browsing by Artist, Song or Composer 25
Browsing by Genre 26
Search Options 26
Changing Music Libraries 27
Internet Radio 27
Web Page Control 31
When You Are Finished Using SoundBridge 37

Advanced Features

Control Brightness, Contrast and Text Display 38
The Settings Menu 38
Music Visualizer Settings 38
Clock Settings 39
Language Setup 41
Safe Mode 42
Restoring Factory Default Settings 42
Geeks — Read This 42

Wi-Fi Setup and Password Help

Wi-Fi Setup Examples
- Apple AirPort (Mac Users) 47
- Apple AirPort (PC Users) 50
- Linksys WAP54G 54
- Netgear WG602 56

Customer Support 59

Appendices

End User Software License Agreement 60
- iTunes Disclaimer 60

Limited Warranty 61
FCC Warnings and Safety Information 63
European Community 66

Technical Specifications 67

GETTING STARTED

To use SoundBridge you will need to:

I. Make sure you have a compatible music server installed. Compatible music servers include iTunes,® Microsoft® Windows® Media Connect, Rhapsody,™ Musicmatch,® and others.

II. Connect SoundBridge Ethernet or Wi-Fi network hardware.

III. Connect SoundBridge to powered speakers or your home stereo system's receiver or amplifier.

IV. Plug in SoundBridge to AC power (there is no "on/off" switch).

V. Put batteries into your SoundBridge remote control.

VI. Establish a network connection. If you are using Wi-Fi and have WEP security enabled, you will need to enter your security key with SoundBridge's remote control.

VII. Enable any music sharing options required by your music server:
   a. **Windows Media Connect:** authorize SoundBridge as a recognized device.
   b. **iTunes:** enable Music Sharing feature in Preferences menu.
   c. **Rhapsody:** enable Music Sharing from the UPnP tab in the Options menu.
   d. **Musicmatch:** enable Music Sharing feature and UPnP option in Options menu.

VIII. Select and connect to your music library.

IX. Play music: Using your remote control, find a song you want to play, then press **Play [▶]** to play it immediately or **Add [+]** to add it to the Song Queue.

Read on for detailed explanations of the steps above.

I. Music Server Software Requirements

Roku SoundBridge is designed to act as a remote client for several kinds of music libraries, including Windows Media Connect, Rhapsody, Musicmatch and iTunes. You can also play WMA and DRM WMA files purchased from popular online music stores such as Napster.™ (Apple's policy does not allow SoundBridge to support protected AAC files.)

What Is a "Music Server"?

SoundBridge is a networked music player. That is, it doesn't store any music. It plays files that you have stored on a computer connected to your home network. (It can also play Internet radio without connecting to your computer, using a direct connection to the Internet.) To play the music files stored on your computer, SoundBridge needs to receive data from software installed on the computer that "serves" the music. This "music server" is responsible for streaming the music to SoundBridge. It is also responsible for sending the list of music you have available to SoundBridge (when asked), and performing searches of the music library at SoundBridge's request.

You probably already have a music server but perhaps didn't realize it. For example, iTunes acts as a music server when it shares music to another iTunes user on the network. Microsoft has released its own music server, Windows Media Connect.

The most common music servers are iTunes, Windows Media Connect, and Rhapsody. But there are others. If you want to use a PlaysForSure music service, you must use Windows Media Connect. If you want to use the Rhapsody music service, you must use Rhapsody as your music server. There is no standard for music servers. They are almost all different. One of the benefits of SoundBridge is that it supports all the common servers out there with an easy-to-use interface.

Note: For playing back Internet radio using SoundBridge's "Radio Favorites" library, you don't need a music server, because SoundBridge receives the radio stream directly from the Internet.

SoundBridge Has Two UI Modes

Each music server has different capabilities. To experience the full SoundBridge user interface, which includes searching and robust browsing modes, you must use a server that supports these functions, such as iTunes or Windows Media Connect. Some other servers don't have the functionality required to deliver the full SoundBridge feature set. For example, you won't be able to search, and the browse modes will vary by server.

You have several options for connecting your music library to SoundBridge:

Music Server	Recommended for Users of . . .	Notes
Windows Media Connect (UPnP Windows Media DRM 10 protocols)	Windows XP with SP2	A free media server from Microsoft. Works with any music jukebox, but optimized for Windows Media Player v.10. Supports SoundBridge's full Browse, Search and Display feature set. Plays: WMA, DRM WMA, WMA Lossless, MP3, WAV, playlists created in jukebox software such as Windows Media Player 10.
iTunes (Bonjour, formerly known as Rendezvous, for discovery; iTunes DAAP for communication)	PC/Mac	A free music server and jukebox software from Apple. Plays: AAC, MP3, WAV, AIFF (no support for protected AAC iTunes Music Store files). Also plays playlists and Smart Playlists created in iTunes. Built-in Internet radio tuner streams Internet radio to SoundBridge.
Rhapsody (UPnP and proprietary Rhapsody protocol)	Rhapsody Subscribers	Server required to run the Rhapsody Music Service, which includes access to popular music and Internet radio..
Musicmatch Jukebox (UPnP AV protocol)	Windows 98 SE/Me/XP/2000 (SP3 or above)	Very popular jukebox software and music service. Has a built-in UPnP AV server supported by SoundBridge. You can also use Windows Media Connect with Musicmatch, which is more feature-rich. Plays: WMA, MP3, WAV (DRM WMA and Musicmatch playlists supported only if using Windows Media Connect Server).
SlimServer (SlimServer protocol)	PC/Mac	Compatible with SoundBridge, but not supported by Roku. Requires download of SlimServer software.

For a more detailed comparison of compatible music servers and links to download them, visit www.rokulabs.com/products/SoundBridge/servernotes.php.

A. Instructions for Installing Windows Media Connect

1. If not already installed, install Windows XP Service Pack 2, a free download from Microsoft or via Windows Update Installer.
2. Download the latest version of Windows Media Player, v.10, a free download from Microsoft or via Windows Update Installer.
3. Download Windows Media Connect, a free download from Microsoft, or via Windows Update Installer.
4. Continue to Section II, "Hooking Up Your Home Network Hardware," on the following page.

B. Instructions for Installing iTunes

1. If you don't already have iTunes, download and install it from www.itunes.com. SoundBridge requires v. 4.0 or later.
2. Continue to Section II, "Hooking Up Your Home Network Hardware," on the following page.

C. Instructions for Installing Rhapsody

1. If not already installed, download, install and launch Real Networks' Rhapsody client, available at www.rhapsody.com.
2. Continue to Section II, "Hooking Up Your Home Network Hardware," on the following page.

D. Instructions for Installing Musicmatch Jukebox

1. If not already installed, download, install and launch Musicmatch Jukebox 9.0 on your PC (the free download is available at www.musicmatch.com).
2. Continue to Section II, "Hooking Up Your Home Network Hardware," on the following page.

II. Hooking Up Your Home Network Hardware (Wired Ethernet or Wireless)

Model: SoundBridge M1000	Model: SoundBridge M2000 and M500
Wireless Connection: No need to install any additional hardware into SoundBridge	**Wireless Connection:** Remove the left end cap of the SoundBridge by gently pressing on the flat part of the end cap, while pressing on the two dimpled tabs in the back, and pivot the cap backward. Insert the Wi-Fi adapter card into the CompactFlash slot. It should be inserted with the **Roku label facing toward the back of the unit** and the Ethernet jack. Close the end cap by snapping it securely back into place.
Ethernet Connection: Plug your cable into the jack provided on the right side of the rear of the unit. Connect your Ethernet cable to a hub, switch or router on your home network. Alternatively, you can connect SoundBridge directly to your computer (and bypass a hub/switch/router), but only with a "crossover" cable (sold separately). Connect the other end of the cable to your network.	**Ethernet Connection:** Remove the left end cap from your SoundBridge by gently pressing on the flat part of the end cap, while pressing on the two dimpled tabs in the back, and pivot the cap backward. If you previously inserted a Wi-Fi card, be sure it is removed; **connecting an Ethernet cable with a Wi-Fi card inserted may cause your connection to fail.** Insert your Ethernet cable into the port. Route your cable toward the back of the unit and replace the end cap. Connect your Ethernet cable to a hub, switch or router on your home network. Close the end cap by snapping it securely into place. Alternatively, you can connect SoundBridge directly to your computer (and bypass a hub/switch/router), but only with a "crossover" cable (sold separately).

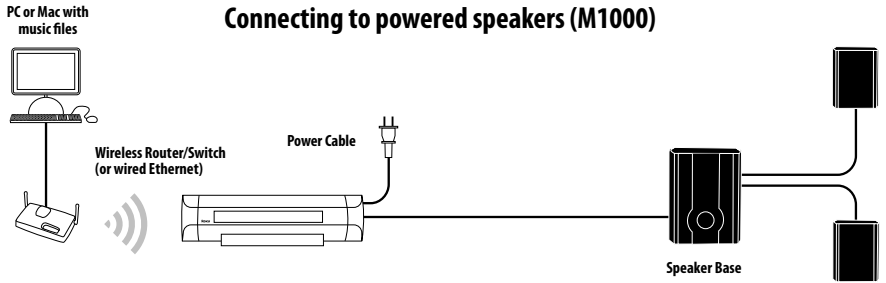
Please note that not all wireless access points are compatible with SoundBridge. You can find a list of supported wireless hardware at www.rokulabs.com/support.

III. Hooking Up Your Speakers or Stereo System

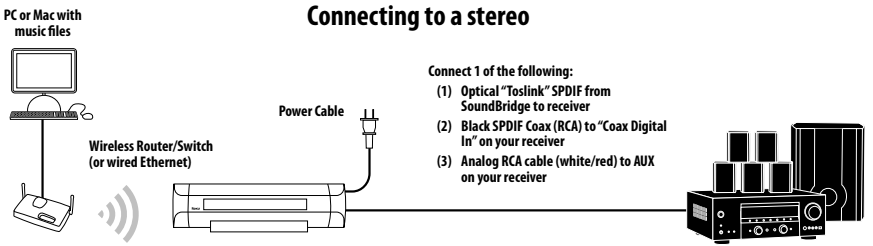
Model: SoundBridge M1000	Model: SoundBridge M2000 and M500
Connect your audio cable into the left side of the rear of the SoundBridge unit.	Remove the right end cap to connect audio cables by gently pressing on the flat part of the end cap, while pressing on the two dimpled tabs in the back, and pivot the cap backward. Connect your audio cable into the the appropriate connector.

Your SoundBridge has several audio connection options:

a. Connect your SoundBridge to a set of powered speakers, using the RCA-to-mini (1/8") Y-audio cable included with your SoundBridge (M2000 and M500), or by plugging your powered speaker 1/8" cable directly into the SoundBridge (M1000).



b. Connect your SoundBridge to your stereo system's Aux or other "Line Input," using one of the RCA (red/white) audio cables included with your SoundBridge.



c. Connect to your stereo system using either coaxial SPDIF digital or optical SPDIF digital (the SoundBridge has connectors for both) — cables sold separately.

IV. Connecting SoundBridge to AC Power

Plug the power cord into the SoundBridge unit, and plug the other end into to a wall outlet. M2000 and M500 users, note that the back of the end cap has a hole for routing your audio and power cables toward the back of the unit. Close your end cap by snapping it securely into place.

Hint: There is no power switch to turn on the SoundBridge. As soon as you plug in the power, you should quickly see the welcome message "Roku SoundBridge." If not, please stop and ensure that your power cable is connected properly on both ends. You will need to see a working display before moving on to the operation of your SoundBridge.

SoundBridge remote control

Warning for M2000 and M500 users: Do not operate your SoundBridge with the end caps removed. Be sure to disconnect SoundBridge from AC power (by unplugging the power supply from the wall) before connecting or disconnecting any cables or the CompactFlash Wi-Fi card. **Always be sure to replace the end caps on the unit** before plugging in the AC power supply into the wall, in order to avoid abnormal unit operation due to static discharge.

V. Using Your Remote Control

First, insert two AAA batteries (included) into your remote control.

Then, point it in the direction of your SoundBridge unit (make sure the IR receiver window is not blocked by a nearby object).

VI. Establishing a Network Connection

Wired Ethernet Network: After you have connected SoundBridge to your computer via a switch/hub/router (or directly to your computer via crossover cable) and powered up the unit, SoundBridge will auto-configure its network settings (using DHCP or AutoIP). There is nothing you need to do. If for some reason you have trouble connecting to your network, select the "SYSTEM CONFIGURATION" option, then select "SHOW WIRED ETHERNET STATUS."

Wireless Network: If you have a Wi-Fi network in your home, with no security keys set, then SoundBridge will also auto-connect to your wireless network. If SoundBridge detects more than one Wi-Fi network (as some advanced users have in their home, or if your neighbor's signal is leaking over), then you will be asked to select the SSID (network ID) to connect to.

If you have a security key, you will need to enter your WEP key manually into SoundBridge. This is the same key you have entered into your Access Point and your computer. Your screen will look something like this:

No music libraries found (why?)
System configuration

Scroll down on this screen using your down ▽ arrow until the option "SYSTEM CONFIGURATION" is highlighted, and press **Select [✓]** on your remote control. You will see a screen that looks like this:

Software version & updates
Select Wi-Fi SSID & password
Show Wired Ethernet status
Show Wi-Fi status

Navigate down to "Select Wi-Fi SSID & password" and select your wireless network name and password.

For additional help connecting to your network, including password help, see the Wi-Fi setup section on page 45 of this guide.

Personal Firewall (iTunes Users)
If you have trouble connecting and your computer has a firewall installed, make sure your firewall is configured to allow iTunes music sharing:

Mac: Open System Preferences. Select the Sharing icon and click on the Firewall tab. Select the option "iTunes Music Sharing."

PC: Refer to your firewall's documentation for opening incoming ports. Configure your firewall to allow incoming connections on port 3689. For WindowsXP Service Pack 2 users, open "Security Center," and click on "Windows Firewall" on the bottom right of the window. In the window that pops up, click on the Exceptions tab, and check to see whether iTunes is shown and checked in the list of Programs and Services. If not, press "Add Program" and add iTunes.

After these changes have been made, restart SoundBridge by disconnecting it from AC power.

For additional help with Firewall troubleshooting, please visit the troubleshooting of our support area at www.rokulabs.com/support, or visit our user forums at www.rokulabs.com/forums.

VII. Enabling Music Sharing

Enable any music sharing options required by your music server:

1. **Windows Media Connect:** Authorize SoundBridge as a permitted client for Windows Media Connect by clicking on the tray icon or balloon window to display a list of clients. (You can also open Windows Media Connect through the Windows Control Panel.) On the Wizard window that appears, click "Add." Select your SoundBridge device and click "OK." Check to ensure that SoundBridge appears on your list of authorized devices. Click "Close."

2. **iTunes:** To turn on the Music Sharing option, select iTunes/Preferences menu (Mac) or Edit/Preferences (PC). In the dialog box that appears, click the Sharing tab. Check the "Share My Music" option to enable sharing on your local network. Do not quit iTunes, or you will break SoundBridge's connection to your iTunes library.

3. **Rhapsody:** Make sure the Rhapsody application is running, then select User Settings from the Options menu, navigate to the UPnP tab, and then click the "Start" button to start the server. You will probably also want to check the "Start UPnP server once logged in" option, which makes the server start each time you run the Rhapsody application.

   Your Rhapsody server should now appear in your list of servers on the SoundBridge, and you will be able to play all your songs and Rhapsody radio stations.

4. **Musicmatch:** Select Options/Settings. Click on the "CD Lookup/Connectivity" tab. Select "Enable Music Server" and then select "Universal. Plug and Play." You can close Musicmatch if you like — the UPnP server will keep running in the background.

VIII. Choosing Your Music Library

Once SoundBridge is successfully connected to your network and your server's music sharing options are enabled, SoundBridge will automatically find your computer's music server and detect any supported music libraries. After SoundBridge detects your music library, you will be prompted to choose the library you would like to access from a screen that looks something like this:

```
Play Dan's Music Library
Play favorite radio stations
System configuration
```

Navigate to your preferred library (in this case, "Dan's music library") and press **Select [✓].** You will then see the "Home Menu," where you can begin browsing and playing your music.

If instead you see the message "No music libraries found (why?)," your network is not connecting to your computer properly or your music library is not found. Please choose "System Configuration" for troubleshooting your network connection. (Make sure your computer is turned on, your server is running, and music sharing is enabled.)

After you have successfully connected to your music library, SoundBridge will automatically connect to that library upon startup. If you would like to return to the screen that allows you to choose your desired libraries manually, select the "Change library or configuration" option located at the bottom of SoundBridge's Home Menu (accessible by pressing the **Home Menu [⌂]** button).

Visit www.rokulabs.com/support for help if you are still having trouble connecting to your music library. Check to make sure your router is compatible with SoundBridge — a list of compatible wireless access points is available at www.rokulabs.com/support.

IX. Playing Music

You are now ready to begin playing music. Using your remote control, find a song you want to play, then press **Play [▶]** to play it immediately. See page 19, "Music Playback," for more detailed instructions about browsing and playing music.

X. Setting Display Preferences (optional)

The brightness of your display can be adjusted by pressing the **Bright [☼]** button.

Text size can also be controlled for the SoundBridge M1000 and M2000's VFD display by pressing the **Bright [☼]** button. Contrast can be controlled this way for models that allow contrast control.

Also, from the Home Menu, you can navigate down to the Settings option to change the appearance of the music visualizer, such as whether it appears full screen during playback, and what kind of information is displayed when a song is playing.

For a complete list of SoundBridge settings, please see the "Advanced Features" section of this user guide.

XI. Checking for the Latest Software (recommended)

Updating your software is quick and easy. You'll need SoundBridge connected to a network which is connected to the Internet via a high-speed connection such as DSL or cable modem. To make sure you have the latest version of SoundBridge software, please follow these instructions:

1. Make sure your SoundBridge is connected to a home network with Internet access.
2. Press the **Home Menu [⌂]** button on the remote control.
3. Navigate down to "Change library or configuration" and press **Select [✓].**
4. Navigate down to "System configuration" and press **Select [✓].**
5. Navigate down to "Software version and update" and press **Select [✓]**.

6. You will be shown your current software version and be given the option to check for a software update.
7. Choose "Yes" to check for new software updates for your SoundBridge.
8. You should see a screen with a progress bar:

   Contacting server
   [********]

9. You will then see one of the following two screens:

   Your software is up to date

   In that case you don't need to do anything. Press **Select [✓]** to accept this message and return to the previous "System Configuration" menu. Press **Exit [⏎]** to return to the "Change Library" menu, navigate to the music library you want to play, and press **Select [✓]**.

   Alternatively, if your software requires updating, you will be prompted to download the update. Select "Yes." After the above "contacting server" message, you will see the following screen:

   Upgrade successful
   Select OK to reboot

Select OK and you will see a screen confirming that your unit is rebooting.

10. After your software has been updated, you may want to check Roku's web site for the latest version of the SoundBridge user guide. Roku will release a new version of the user guide for PDF download if new features or functions have been added to the SoundBridge software. Please visit www.rokulabs.com/support for the latest version of the manual.

XII. Wall or Under-Cabinet Mounting (optional)

Your SoundBridge ships with a portable black rubber table stand which looks great on your shelf or night stand. An optional wall mounting kit is available for sale at www.rokulabs.com/buy. This allows the SoundBridge to be mounted to the wall or under a cabinet using a sleek, hidden bracket which screws into your wall. For more information, please visit Roku's web site.

MUSIC PLAYBACK — OVERVIEW

Audio File Formats Supported

You are now ready to begin playing music. SoundBridge supports a wide variety of audio formats, including MP3, AAC, WMA, DRM WMA, AIFF, LPCM and WAV. (WMA Lossless is supported only when using Windows Media Connect, which transcodes to LPCM; FLAC and Ogg-Vorbis are supported only with the optional third-party SlimServer software.) Please note that AAC files purchased from the Apple Music Store (also known as DRM AAC files) will appear as menu items with a padlock icon, and are not available for playback on SoundBridge at this time.

Sample rates supported: (kHz) 8.0, 11.025, 12.0, 16.0, 22.05, 24, 32, 44.1, 48.0

Sample sizes supported: 8 bit, 16 bit

Number of channels: mono or stereo

Navigation Quick Reference

△ ▽ The Up and Down arrow buttons take you through a list item by item.

◁ ▷ The Left and Right arrow buttons allow you to "fast browse" — either skip to the next (or previous) letter, or if your list is not arranged alphabetically, by about 5% of your list at a time.

➔ The arrow icon shows current item highlighted.

The **Select [✓]** button takes you one level down into the highlighted item. When you can go no lower in your menu structure, the **Select** button calls up options to start song playback. (It may help to think of pressing the **Select** button as clicking on the highlighted item with a mouse.)

The **Play [▶]** button begins playback of your current selection.

The **Pause [II]** button pauses playback of audio currently playing.

The **Add [+]** button adds your current selection to the end of your Song Queue.

⏭ ⏮ The Next Track and Previous Track buttons advance or retreat playback of your Song Queue one song at a time.

The **Home Menu [ ]** button takes you to the Home Menu.

The **Search [ ]** button takes you to your text-based search options.

The **Exit [ ]** button takes you one step backward (think of it as the BACK button on your Internet browser).

Pressing the **Exit [ ]** button repeatedly will display the "Now Playing" screen, which displays information about the currently playing song.

Screen Icons Quick Reference

On your "Song Queue" screen:

♪ The music note icon denotes a single track (as opposed to a collection of tracks).

)) The speaker with audio waves shows current song playing in the "Song Queue" menu.

The speaker without audio waves shows current song paused in the "Song Queue" menu.

The upward facing radio transmission signal indicates an Internet radio station.

The padlock icon indicates secure AAC songs purchased from the Apple Music Store; these songs are not available for playback by SoundBridge.

On your "Now Playing" screen:

▸ The Play icon indicates SoundBridge is in playback mode.

II The Pause icon indicates playback has been paused.

■ The Stop icon indicates playback has been stopped.

The Shuffle icon (with two crossed arrows) indicates playback of your Song Queue is happening in random order.

The repeat icon indicates continuous playback of your Song Queue.

The repeat single track icon indicates continuous playback of the currently playing track.

The "X" icon indicates an unsupported file format.

MUSIC PLAYBACK — TUTORIAL

The Home Menu

To begin navigating through your music, start on your "Home" menu, by pressing the **Home Menu [⌂]** button. The display on SoundBridge should look something like this:

```
➔ Playlists
  Browse
```

Only the first two lines of the Home Menu are displayed at once (or the first four lines, if you are using M2000 with four lines enabled in your display settings, or one line if you are using an M1000 or M2000 with the largest font size enabled), but the scroll bar at the right of the screen shows you where you are in the list, and how much more information is available above and below your current screen view. Use the Up/Down △ ▽ arrow buttons to navigate between the following options on the Home Menu:

```
➔ Playlists
  Browse
  Search
  Show song queue
  Now playing
  Settings
  Change library or system configuration
```

The ➔ arrow to the left of a menu item denotes the current item.

Hint: Because you can't see the whole list of options at once, use the scroll bar (at the right of your display) to see where you are in your list.

Browsing by Album

Press the Down ▽ button until you see the BROWSE option highlighted and press **Select [✓]** on your remote control. You will see a listing of browsing options:

```
➔ Browse albums
  Browse artists
```

If you scroll down, you will see the other two browsing options:

```
  Browse composers
  Browse genres
```

Now, if you navigate to the BROWSE ALBUMS option and press **Select [✓],** you will see an alphabetical listing of Albums found in your music library. The screen will look something like this:

```
➔ Parachutes
  Paul's Boutique
```

Navigate to the album that you want to hear using the Up/Down △ ▽ arrow buttons — in our example, "Parachutes." When the album you want is selected, press the **Select [✓]** button for a listing of songs found on this album.

The music note ♪ next to each song name indicates the selection is an individual track (and not a playlist, album or other collection of songs). Please note that songs purchased from the Apple Music Store will be denoted in the display with a padlock 🔒 icon. SoundBridge is not able to play back these "locked" files — they will simply be skipped over during playback.

```
➔ ♪ Don't Panic
  ♪ Shiver
```

Use the Up/Down △ ▽ arrows again to highlight the song you want to play. Press the **Play [▶]** button to start that song playing. When the song begins playback, the display will switch to the "Now Playing" screen, which looks something like this:

```
Don't Panic                    0:10/2:17 ▸
Coldplay        Parachutes (2000) (|||------)
```

Please note that the artist and album information may be abbreviated, or appear one line at a time, if the total number of characters exceeds what can be displayed at once. See the "Settings" chapter at the end of this manual for more information on display options.

> ***Hint:*** If you would like to go back to the above "Now Playing" screen at any time in order to know what's playing, press **Exit [⮐]** several times until you see this screen. Alternatively, press **Home Menu [⌂],** then scroll down to the "Now Playing" option and press **Select [✓]**. This screen also appears by default after a few minutes of inactivity on the remote control.

If you press **Play [▶]** on an album track, that track will play, followed by each track remaining on the album. For example, if you press **Play** on track 5 on an album with 10 tracks total, then tracks 5–10 will play. (For continuous playback of the entire album, press **Repeat [⮌]** on your remote control — the album will play until the end, then start again at the beginning.)

You can also navigate to an album, artist or genre selection while browsing, then press **Play [▶]** to start playing the entire contents of the selected category. (Note: This feature will not work if using a non-search-capable UPnP music server.)

If you are not sure what you have selected to play, simply press the Down arrow ▽ from your "Now Playing" screen (the screen that displays the currently playing song). This will list your upcoming songs, also known as your "Song Queue" (see next section).

Press **Pause [II]** at any time to put playback on hold. Press **Play** or **Pause** a second time to resume playback.

> ***Hint:*** If you navigate to a new song and press **Play** while your original selection is playing, you will "flush" the old selection (called the "Song Queue") and replace it with your new selection. Therefore you should only press **Play** when you want to erase your existing Song Queue and start a new one. Use the **Add [+]** button to add a song to the existing Song Queue.

Building a Song Queue

Let's say you would now like to choose several different songs or selections to play in a row. This is called building a "Song Queue." SoundBridge automatically builds a Song Queue every

time you select a song or album to play. You can add to that list by navigating to your preferred music and pressing **Add [+].** The selection will be added to the end of the current Song Queue.

You may add a single song, an entire album, all songs by an artist, all songs in a genre, or any search result — just browse to the selection you prefer and press **Add**. For example, if you would like to play all songs by Coldplay, select the "Browse artists" option from the Home Menu/Browse option. Navigate to Coldplay in your artist list, and press **Add**. All songs on all albums by Coldplay will be played by album, in the order they appear on each album. For more information about browsing and searching options, see the "Browsing" and "Searching" sections later in this user guide.

You have several other options for building a Song Queue. After you press Select while browsing on a song, a "Song" menu appears with the following options:

1. Play, starting with the selected song (and clear previous Song Queue)
2. Get information about the selected song
3. Play the selected song only (and clear previous Song Queue)
4. Add this song to the Song Queue (same as pressing the **Add** button)

Note that both "play" options 1 and 3 above are "destructive"; they will clear your previously existing Song Queue. The "add" option, however, will add the selected song to the end of your existing queue.

The first, "play these songs" option is described in the section above — it starts playing your album (or other browsed list), beginning with the current track.

If you choose "Play songs" on any track in your selection, the entire list is added to the Song Queue, but playback starts on the chosen track. If you have the **Repeat [🔁]** option selected, the earlier tracks in the queue will play after the last song (and so on indefinitely). If you have the **Shuffle [🔀]** option selected, then the chosen track will play first, followed by all the other tracks in the list in random order.

The "Add song to Song Queue" option behaves similarly to the **Add** button— it places the current song at the end of your playlist.

You can add an almost unlimited number of songs to your Song Queue. Each selection will be played in the order it was entered (unless you have chosen to **Shuffle** your Song Queue).

Hint: After you have selected multiple songs to be played in turn, you can use the "Next Track" ⏭ and "Previous Track" ⏮ buttons to skip from song to song in your Song Queue.

Reviewing a Song Queue

At any point, you can review what's in your Song Queue by pressing the down arrow ▼ from the Now Playing screen, which is the default screen that appears while SoundBridge is playing. The Now Playing screen looks something like this:

```
Don't Panic                    0:10/2:17 ▸
Coldplay        Parachutes (2000) (|||------)
```

You can also press **Exit [⮌]** several times from any point in your browsing; eventually, the Now Playing screen appears.

Alternatively, you can press **Home Menu [⌂]**, then select the "Show song queue" option. You will see the entire list of songs in your song queue; refer to the scroll bar on the right side of the screen to determine where in the list you are located. Press the Up/Down arrows △ ▽ to see the entire list of selections in your Song Queue. The currently playing selection is indicated by a speaker ◂ icon.

You cannot save a Song Queue that you have created — it's only held in memory temporarily and then erased when you build your next Song Queue. If you would like to build a Song Queue that you can save and recall at will, please build a Playlist in your music jukebox software (see "Playing a Saved Playlist" below).

Erasing a Song Queue

If you change your mind and decide you don't want to play the Song Queue you've just created, simply select something else to play. Navigate to another selection (song, playlist, etc.) and press **Select [✓]** (not Add). This selection immediately replaces your old Song Queue.

Repeat and Shuffle

Pressing **Repeat [🔁]** once makes your Song Queue play continuously. You will see the Repeat icon 🔁 displayed on the right side of your "Now Playing" screen below the Play ▶ icon. Pressing **Repeat** again makes the current song play over and over; you will see another Repeat icon, a circle with just one arrow 🔂. Press **Repeat** a third time and you will remove the repeat command altogether.

Pressing **Shuffle [🔀]** while playing a Song Queue will give you the following options:

Shuffle On — will play everything in your Song Queue in random order. (The shuffled order of songs will be displayed in the Song Queue.) An icon with two crossing arrows 🔀 will be displayed on your Now Playing screen.

Shuffle Off — will play everything in your Song Queue in the original order.

You can execute the **Repeat** and **Shuffle** command from any menu in SoundBridge. Even though you can only see the mode change on the Now Playing screen, the command is taking effect.

Pausing Music Playback

Press the **Pause [⏸]** button to halt music playback. Notice a Pause icon ⏸ is displayed at the top right of your "Now Playing" screen, indicating that you're in Pause mode. Pressing the **Play [▶]** button (or the Pause button again) will resume playback right where you left off.

When the Song Queue has played all the way through, it will stop. You will see the Stop icon ■ on the right side of your display. To start playing your Song Queue again at the beginning, press the **Play** button.

Hint: Pressing **Pause [⏸]** to stop playback of your Song Queue will only do so temporarily. If you want to clear the memory of your old Song Queue or selection entirely, simply navigate to something else you want to play, and press **Play [▶]** to play your new selection, effectively flushing your old selections or Song Queue away, to be replaced by your new selection. Therefore, if you want to build on your existing Song Queue, press **Add [+]** instead of **Select [✓]** and your prior selections will be preserved.

Skipping Tracks During Playback

If you'd like to skip a song during playback, press the "Next Track" button ⏭ on your remote control. Or, navigate to another song through your browsing options and press **Select [✓]**.

Playing a Playlist

Let's say you have created a playlist of your favorite Disco hits in your music jukebox software, and named it DISCO INFERNO. Press the **Home Menu [⌂]** button to go to the Home Menu. Go to the PLAYLISTS option, then press the **Select** button. Use your Up/Down △ ▽ arrows to browse your playlists one by one, find the one called DISCO INFERNO, then press **Play [▶]** to play all songs on the playlist immediately or **Add [+]** to add the playlist to your Song Queue.

Hint: If your playlist was created in Windows Media Player or other software using Windows Media Connect, be sure to save your playlist in the My Music/My Playlist folder on your hard disk.

Browsing by Artist, Song or Composer

From the Home Menu, use the Down ▽ arrow to highlight "Browse" and then press **Select [✓]**. Navigate to "Browse Artists" and press **Select.** Your screen will look something like this:

```
➔ Annie Lennox          ∧ <A>
  Ben Folds Five        ∨
```

Find the artist you would like to play and press **Select**. You will see a screen that lists the albums available by that artist:

```
➔ <Show all matching songs>
  Medusa
```

While the first menu option <All matching songs> is active, press **Add [+]** to add this selection to your existing Song Queue, or press **Play [▶]** to play all songs by this artist instead and replace your existing Song Queue. (Songs will play in the order they appear on each album, with each album played in alphabetical order).

Hint: Artist names starting with "the," such as the Beatles, will be found under the first letter of the word following "the" — in this case, "B" for "Beatles."

You can choose specific albums or songs to play by navigating down to your desired album and pressing **Add** to add to an existing Song Queue, or **Play** to replace an existing Song Queue. Note: if your selected album contains songs by different artists, such as compilation albums or movie soundtracks, only the song(s) by your artist will be played.

Hint: To browse faster, instead of browsing up and down one at a time using Up/Down arrows △ ▽, you can "speed browse" through your lists by pressing the Left/Right arrows ◁ ▷. This will skip by the letter of the alphabet. Note that the search function is a string search — "RA" will return not just Radiohead but also other words containing the string, such as Shakira and Franz Ferdinand.

Browsing by song or composer works the same way as browsing by artist — see instructions above.

Browsing by Genre

From the Home Menu, navigate down to the BROWSE option and press **Select [✓]**. Scroll down to "Browse Genres" and press **Select**. You will see an alphabetical listing of genres that are available in the music library that you are browsing. To add all songs within a Genre to your Song Queue, highlight that Genre and press **Add [+]** (or **Select [✓]** to open additional options for playback).

To browse within a genre, such as Hip Hop/Rap, press **Select** on your desired genre. You will have the option to see all available artists in that genre, and a list of individual albums by those artists. At any point, you can press **Add** to add that selection to your Song Queue or press **Select** to navigate to the next level of detail.

> ***Hint:*** Information about your music, including Song Name, Artist, Album, and Genre is usually created automatically by the software you used to save your audio CD files on your computer's hard drive (aka ripping). This process creates data called "ID3 tags" to describe each track. If this data is missing from your audio files, they will not appear when you browse by that data category. If you need to edit your ID3 tags, or if you are not satisfied with the description of genres (or other data) assigned to your music file, it is possible to edit that data in iTunes, Windows Media Player or other supported music jukebox programs. (In iTunes, select the file(s) to edit, click on File/Get info, then click on the Info tab).

Search Options

To search for a specific selection by spelling it out, you can press the **Search [🔍]** button on your remote control, or navigate down to the "Search" option from the Home Menu. Either way, you will have the following options:

Search for albums
Search for artists
Search for titles
Search keywords

Press **Select** on the option you would like to search with. Then, use your Left/Right ◁ ▷ arrows on the remote control to enter characters for spelling your selection and then pressing **Select**. When you are done spelling, use the Down ▽ button to go to the OK option and press **Select**. (If you make a mistake, use the Down ▽ button to go to the Delete option and press **Select**.)

Hint: Partial spelling is OK — the Search function searches for letters anywhere in the word, as opposed to just at the beginning. For example, to search for Radiohead, you can enter any combination of letters found in the word ("RA," "DI," "HE," etc.), and the results will return all Artists containing those letters (e.g., if you enter "DI" you'll get Ra*di*ohead, In*di*a Arie, and *Di*ana Krall).

When you find the music you like, use the **Add** button to add it to your Song Queue. If searching for albums or artists, you can press **Select** to navigate down one level to individual tracks.

If an exact match is not found, your results will show an empty search.

Changing Music Libraries

If you have multiple music servers running on your network at once, you can easily navigate between them. Press **Home Menu [⌂]** on your remote control. Navigate down to CHANGE LIBRARY OR CONFIGURATION and press **Select [✓]**. All your available libraries will be displayed. Press **Select** to access your desired music library.

Internet Radio

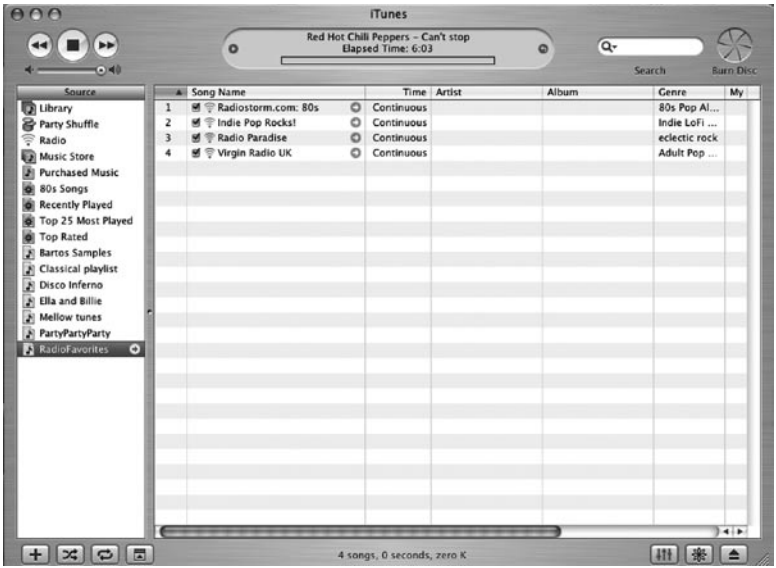
One of SoundBridge's coolest features is its ability to play Internet radio stations. Currently, there are three ways to listen to Internet radio using SoundBridge: from a playlist created in iTunes; from Windows Media Player; and from the "Favorite Radio Stations" music library, which you can customize and play without the computer on.

Hint: it is possible to run iTunes just for playing Internet radio while using Windows Media Connect or another server for playing music.

To play Internet radio stations with the iTunes music server, follow these steps:

1. **Create an iTunes playlist containing your favorite radio stations.** In iTunes, create a new playlist (any name is okay, but let's use "RadioFavorites" for this example). Next, browse the iTunes Internet radio station list by clicking on the Radio button on the Source tray of iTunes:

Then, drag & drop the radio stations you like onto the new “RadioFavorites” playlist. The result is a standard iTunes playlist that contains your favorite radio stations (see next image).



2. **Play your playlist on SoundBridge.** From the SoundBridge Home Menu, select "Playlists." Scroll down until you find the "RadioFavorites" playlist. Select it. You can now scroll through your favorite radio stations. Press **Select [✓]** to start playing your desired station. Use the Up/Down △ ▽ arrows to see the list of available stations, or the Next Track ⏭ , Previous Track ⏮ buttons to switch stations.

To play Internet radio with SoundBridge's "Favorite Radio Stations" Library:

With the "Favorite Radio Stations" Library, you can access your favorite Internet radio stations without running your iTunes music server on your computer — in fact, your computer does not even have to be turned on. All you need is an active Internet connection on your home network. To navigate to the "Favorite Radio Stations" Library, follow these steps:

1. On your SoundBridge remote, press **Home Menu [⌂]**. Navigate down to CHANGE LIBRARY OR CONFIGURATION and press **Select [✓]**.
2. Your available music libraries will be displayed, including the one named "Favorite Radio Stations." Select that library and you will see a list of twenty stations.
3. Press **Select** to begin playback of your favorite station.

When you begin playback, you will see a screen similar to this:

Michelle Shocked – Black Widow
http://www.radioparadise.com
RadioParadise.com

The song and artist data is provided by each Internet radio station. Therefore, it may not be available for every Internet radio station, or it may appear in a slightly different format.

SoundBridge includes twenty pre-saved radio stations. You can change these stations to your own ten favorites as follows:

1. If you are still in the "Favorite Radio Stations" music library, exit it and enter your iTunes library (following steps 1 and 2 above, choosing the name of your iTunes music library in step 2).
2. Create a playlist in iTunes containing your favorite radio stations, as described previously in this section (on page 28).

   Hint: Your playlist can contain as many radio stations as you like, but only the first twenty will be saved to your favorites. You can rearrange them by dragging and dropping to their desired order inside the iTunes playlist.
3. On the SoundBridge Home Menu, select **Settings,** then **Memorize Radio Playlist.**
4. You will see the following instructions: "Click on a playlist — the first twenty streams will be saved." Navigate to the playlist you want to save, in our example "RadioFavorites," and press OK.
5. You will receive a confirmation of what Internet radio streams were saved (up to the first 30 characters of the name will be displayed). You can press **Exit [⮐],** or navigate to your desired audio stream and press **Select [✓]** to play it immediately.

To edit the saved stations in the "Favorite Radio Stations" library, simply repeat steps 1–5 above. Your old selections will be overwritten with your new ones. If your favorites total fewer than twenty stations, SoundBridge will add those to the top your Favorite Radio Stations selections, and the remaining selections will remain the ones that were in the list previously.

You can also change your favorite radio station presets using SoundBridge's web page control — see section below.

Note: To date, there is unfortunately no standard for Internet radio stations, and many different audio formats and streaming techniques are used in the industry. SoundBridge will support many Internet radio stations, but not every one of the many, sometimes proprietary, standards. The only sure way to know if a radio station will play on SoundBridge is simply to try it.

Web Page Control

Use SoundBridge's Web page to control SoundBridge playback remotely, configure your SoundBridge or configure your "Favorite Radio Stations" presets directly by entering the stream URL directly into the web page. (See previous section for more information about "Favorite Radio Stations".)

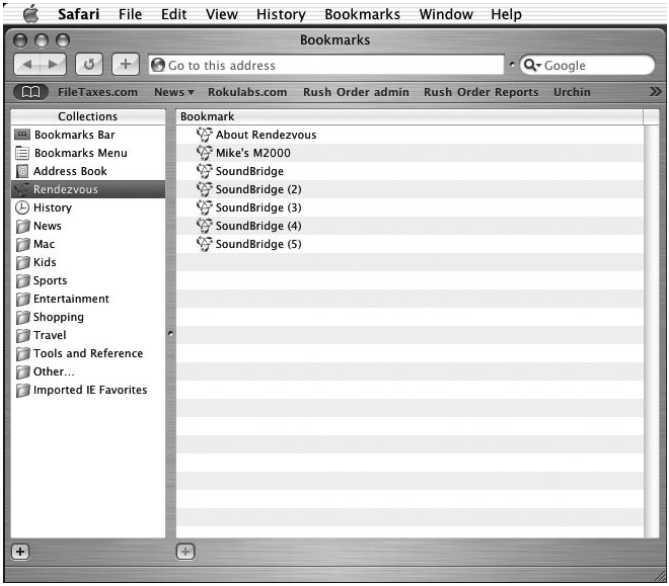
There are several ways to access the web page:

1. PC/Windows users: You can configure your computer to display UPnP devices including the SoundBridge in your "My Network Places" window, which can be opened from the Windows Start menu. If this option is not already enabled follow the steps below.

    - Open Add or Remove Programs in Control Panel.
    - Click Add/Remove Windows Components.
    - In the Components list, select the Networking Services check box, and click Details.
    - Make sure the UPnP User Interface check box is selected.
    - Once enabled, double-click the device to open the SoundBridge web page.

2. Apple/OSX users: Launch the Safari web browser. Because SoundBridge uses the Bonjour protocol (formerly known as Rendezvous), the device will automatically announce itself. In Safari, be sure you have your bookmark list showing as in the screen shot below. If it is not

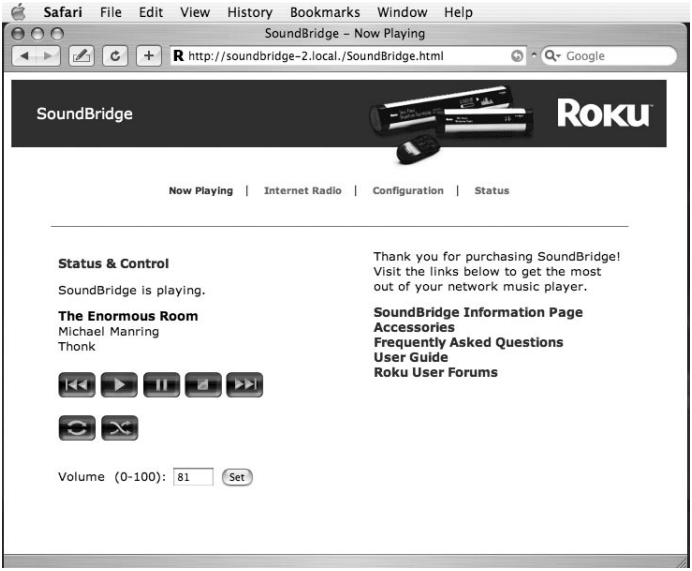
showing, go to the Bookmark menu and select “Show All Bookmarks”. Your screen should look something like the one below. Click on the Rendezvous option in the bookmark list to reveal your SoundBridge. (If more than one device is connected, they will be named SoundBridge, SoundBridge (2), and so on.)



Then, double-click on the name of your device to open the SoundBridge web page.

The SoundBridge Web page includes the following four tabs:

1. **Now Playing** — Allows for control of playback of current music selection, including Pause, Play, Next/Previous Track, Stop, Repeat and Shuffle. You can also change the volume level.

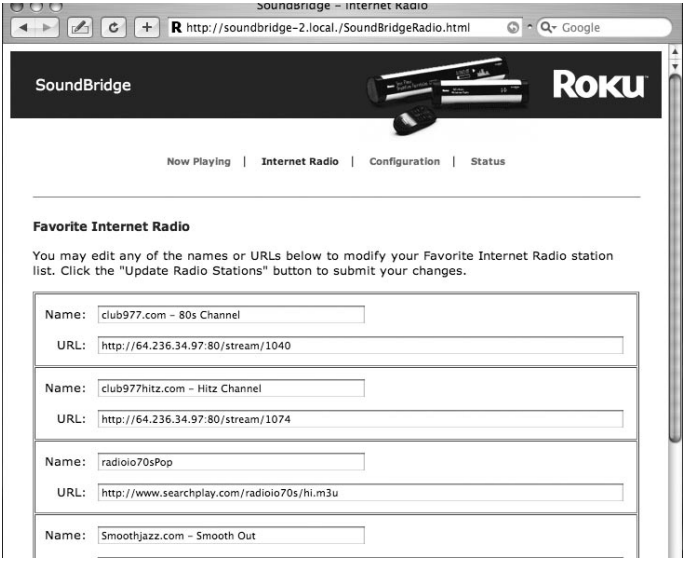


2. **Internet Radio** — Allows you to specify up to twenty of your favorite Internet radio streams, to be stored in the "Favorite Radio Stations" music library.

   If you experience problems with playback of an Internet radio stream you copied from a web browser, make sure that your stream ends with the ".pls," or ".m3u" extension — sometimes copying the link that appears in your browser will exclude this information (because it's being redirected behind the scenes) and your stream will not play without it.

   For example: you entered a URL looks something like this: http://www.hostname.com:9152. You can try simply adding 'listen.pls' to the end of the URL, like this: http://www.hostname.com:9152/listen.pls. Currently, SoundBridge can stream MP3 and WMA.

RealAudio streams (ending in .ram or .rm) are currently not supported. (Stay tuned for additional format support in future software updates.)

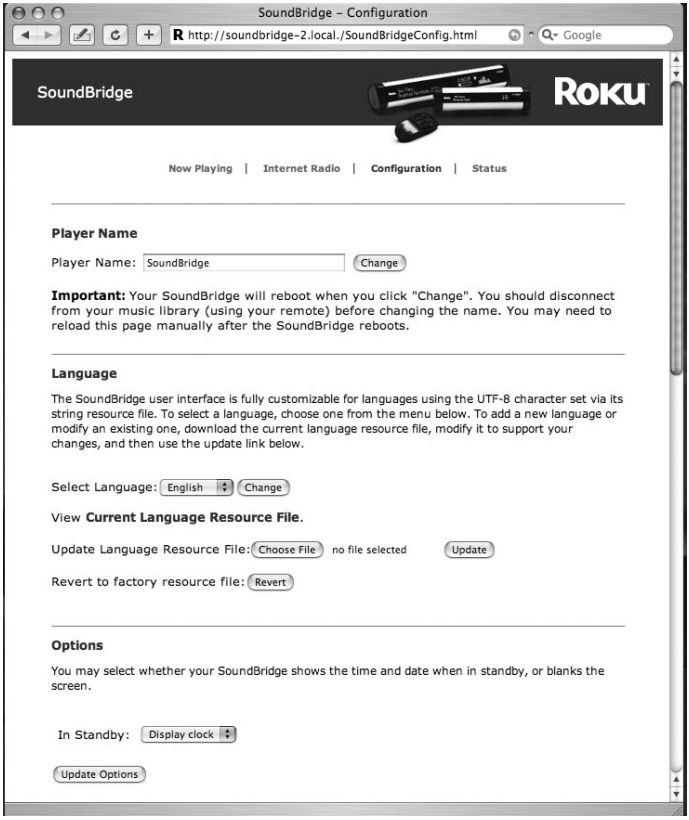


When you are finished entering your radio streams, press the "Update Radio Streams" button at the bottom of the page.

> ***Hint:*** If for some reason you copy a URL that is too long to fit inside the text field (longer than 250 characters), or if you erase the URL in the field, SoundBridge will automatically revert to the previous URL that was in your list before.

Please see the previous section for information about accessing and playing your stored stations from the "Favorite Radio Stations" music library.

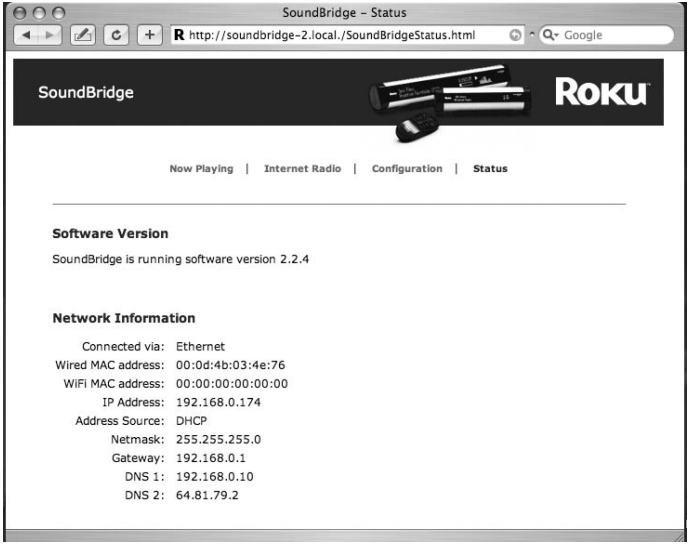
3. **Configuration** — Use this page to enter a unique name for your SoundBridge unit, choose a language other than English, or set options for displaying the time and date on your SoundBridge when it is in Standby mode.



4. **Status** — Use this page to view the version of software currently running on your SoundBridge. You can also review your network connection information, including IP address and MAC addresses.

   If you are using a Wi-Fi connection, this page will display your Wi-Fi signal strength and the name of the network to which you are connected.

   When you are finished using your web page, simply close your browser window.



When You Are Finished Using SoundBridge

When you are finished playing music and using the SoundBridge altogether, just press the **Standby [⏻]** button on your remote. In Standby mode, SoundBridge can display the date and time or a blank display, depending on your preference. (See page 41 for more information about setting these preferences.)

If you were playing Internet radio from your "Favorite Radio Stations" library when you pressed Standby, then pressing Standby again will resume playback of that station. Otherwise it will return you to the music library to which you were most recently connected.

If you plan to disconnect the SoundBridge from AC power after you are done using it, be sure to press the Standby button first. This logs you out of the music server software running on your computer.

> ***Note:*** Wait approximately 10 seconds after pressing **Standby [⏻]** before unplugging SoundBridge; this gives SoundBridge time to flush its settings for a clean reboot.
>
> ***Hint:*** If you unplug the SoundBridge from AC power five times without pressing **Standby [⏻]** on your remote first, iTunes may lock you out of connecting to the server. That's because iTunes allows a maximum of five users to connect at one time, and if you don't put SoundBridge into standby mode first, iTunes may believe you are still connected. To restore your access to the iTunes server, close iTunes and then restart it. You should then have no trouble connecting to the iTunes server as before.

ADVANCED FEATURES

Control Brightness, Contrast and Text Display

The **Bright [☼]** button on your remote lets you change the brightness of your display using the Left/Right arrows ◁ ▷. For SoundBridge M500, you will see the option to change contrast using the Up/Down arrows △ ▽. For SoundBridge M1000 and M2000, text size can be controlled using the Up/Down arrows △ ▽, affecting how many lines of text you see on screen at one time. M1000 can display one line or two lines at once; M2000 can display one, two, or four lines at once.

The Settings Menu

SoundBridge settings can be changed in the SETTINGS option located at the bottom of the Home Menu. Your Settings screen will show the following options (scroll down using your remote control to see the complete list):

Visualizer Settings....
- ✔ **Return to Now Playing when idle**
- ✔ **Scroll long info in Now Playing**
- ✔ **Display composer for classical works**

Skip items un-checked in iTunes

Music Visualizer Settings

You can customize the kind of visualizer to display, whether it appears full-screen or on the right side of the Now Playing menu, and other options. Use the Home Menu/Settings/Visualizer Settings command to explore these options.

Clock Settings

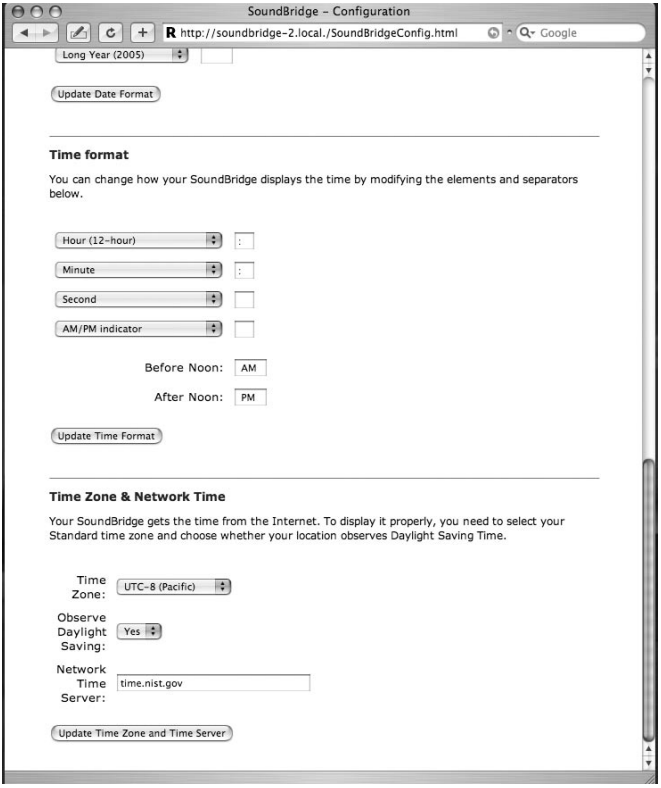
When in standby mode, SoundBridge can display the date and time, similar to the screen below.

1:17:49 PM
Monday, April 17, 2005

You can customize the clock display in a number of ways:

1. When in Standby mode, use the Left/Right arrows to adjust the brightness of the clock display. (This will not affect the brightness settings of the display when in regular playback mode.)
2. When in Standby mode, use the up/down arrows to cycle through modes of display. For example, you can display large and small fonts, display the time but not the date, etc. (Again, these settings will not be applied to your display when you resume SoundBridge's regular playback mode.)
3. Use SoundBridge's web page to configure the format of the date and time. You can also turn off the clock display altogether. Please see page 32 in the Music Playback section of this user guide for instructions on launching your SoundBridge web page.

After your web page is launched, click on the Configuration tab. Scroll down on the page until you see a screen that looks similar to the one below.



Here, you can customize how your time appears, and correct errors in the display of your date and time. First, be sure that your time zone is selected correctly. SoundBridge uses an Internet connection to display the proper time for your time zone. If your Internet connection is not available, SoundBridge will be unable to display the date and time in Standby mode.

Format your time display by choosing what to display in each of four fields. SoundBridge "strings together" all the fields to create the time display. For example, if you don't want to see seconds, or don't want to see "AM/PM", select the hour and minute format, then choose the "Leave Blank" in the remaining drop down menus.

The date selection works the same way — you can choose the format that best fits your geographic standard or your personal preference.

To disable the date/time display altogether when SoundBridge is in standby, select the corresponding option on this page.

When you are finished, simply close your web page.

Language Setup

Use SoundBridge's web page to choose a language other than English. Please see page 32 in the Music Playback section of this user guide for instructions on launching your SoundBridge web page. Then, choose the "Configuration" tab. You can choose your language in one of two ways:

1. From the drop down menu titled "Select Language", Choose from the options available. (Currently, SoundBridge ships with the following language options: Japanese, German, French, Swedish, and English).

2. If your language is not listed in the above options, you can upload a Language Resource File containing the instructions to display another language. To see if a third-party translation already exists for your desired language, please visit: www.rokulabs.com/support/international. To download and edit or "translate" this file for your language, click on the "View Current Language Resource File" link. To upload a resource file that you or another third party has created, use the Browse button on the web page to locate the file on your computer's hard drive, then click "Update" to load it into SoundBridge.

   Hint: You can always revert to SoundBridge's built-in English language display by clicking the **Revert** button on the bottom of the Language settings area.

When you are finished editing your language settings, simply close your web page.

Safe Mode

SoundBridge includes an option to run in "Safe Mode," which is a mode with limited features that is enabled automatically when SoundBridge detects that its software has become corrupted. Its goal is to download a new version of software from Roku and to restore factory settings. When SoundBridge enters Safe Mode, you will notice the text "Safe Mode" displayed on the right side of the display. Your menu will only include options to update your software and restore factory defaults.

While in Safe Mode, your stored network settings will not be recalled. Therefore it will be necessary to connect SoundBridge via Ethernet before SoundBridge can connect to the Internet in order to download new software.

Safe Mode can also be entered manually by powering SoundBridge off (by unplugging it from power) and on again, while at the same time pressing and holding any button on the remote control.

Restoring Factory Default Settings

To restore SoundBridge's factory default settings, press **Home Menu**, select "Change Library or Configuration," then select System Configuration, then select "Reset to Factory Defaults."

Geeks — Read This

The SoundBridge has a command line interface that you can "telnet" to for piddling about. You will need to telnet to port 4444. Type "?" at the command prompt to see a list of commands. We will be documenting in more detail how to control a SoundBridge in the coming months, as well as updating the software in this area. When documentation is available, it will be posted on the developer section of our web site.

SoundBridge has a built-in UPnP AV "media renderer." This protocol can be used to control the SoundBridge from your own software. Please watch the developer section of our web site for updates on this feature.

WI-FI SETUP AND PASSWORD HELP

Background

Why Wi-Fi?

With SoundBridge's wireless functionality, you can stream music from computers on your wireless network to one or more Wi-Fi enabled SoundBridge devices via your wireless access point (WAP). You can even connect up to five SoundBridges to one iTunes music library, or up to ten SoundBridges to one Windows Media Connect library, and listen to different tunes in every room of your house.

Wi-Fi Hardware

For a list of compatible Wi-Fi access points that Roku has tested with SoundBridge, please visit www.rokulabs.com/support.

Wi-Fi Setup Instructions

1. Verify that your wireless network is up and running on your computer. If you are setting up this wireless network for the first time, please make sure that you have followed your wireless vendor's instruction manual for proper configuration of your wireless access point.
2. SoundBridge M1000 users, skip to step 3. M2000 and M500 users, follow these steps:
   - Remove both the left and right end caps of SoundBridge by pressing on the two release tabs labeled "push." If your SoundBridge is currently powered on, press Standby on your remote and then disconnect SoundBridge from power by unplugging the AC power cord.
   - Remove the CompactFlash wireless card from its packaging and insert the card into the CF slot on the left side of SoundBridge. Make sure that the "Roku" label and two small status lights are facing away from you as you gently push the card into place. (Note: The LED lights will not be illuminated until you power on SoundBridge.) Be careful, forcing the card into position may damage your device.
   - If you had been previously using a wired Ethernet connection, disconnect the cord

from the SoundBridge. Make sure you have only the Wi-Fi card or the wired Ethernet connection attached to the device — never both at the same time.

3. Run your music server software on the computer connected to your wireless network.
4. Turn on your SoundBridge by plugging the power cord into the right side of the device, then into the wall AC outlet. Verify that the screen displays the Roku logo.
5. Upon startup, SoundBridge will attempt to connect to any wireless access point within range that does not require a password. If your home wireless network requires no password and there are no other wireless networks in the vicinity (such as those spilling over from a neighbor's house), then your SoundBridge should automatically connect with no additional configuration, and you will see a list of music servers on your network to connect to.

However, it's possible you will need to configure your wireless network as described below:

- If your SoundBridge detects more than one available wireless network, then you will need to configure SoundBridge's Wi-Fi settings. Choose "System Configuration" from the Home Menu, and then select "Select Wi-Fi SSID & Password." You will then see a list of available wireless networks. If you see your desired network, select it. If you don't see the desired network, make sure that your wireless router is within range and that it is functioning properly.
- Some wireless networks don't "advertise" themselves (a.k.a. "closed networks"). If your wireless access point is functioning properly but you do not see the network listed, you should enter your wireless network name by selecting "Specify a wireless network..." (Refer to your wireless access point's documentation or utility software if you don't know the name of your wireless network.)
- Next, your SoundBridge will ask you whether the wireless connection requires a password. If you do not have a wireless password, select "No" and skip to the next section. If you do have a wireless password, select "Yes." Read the instructions on the screen to determine what type of wireless password you have on your network. If you are unsure, you may wish to refer to your wireless router documentation. (See hints

below for help finding your wireless access point's password.) Enter your password using the Left/Right arrow keys to navigate between characters. Press Up to enter into uppercase mode, and Down to go back to lowercase. When you're done, press Down again to go to and select OK.

- Select "OK" to reboot the unit. Upon restarting, SoundBridge should automatically connect to the network you have specified.

If the connection is successful, all the available music libraries will be listed on your screen. Use the up and down arrows on your remote to navigate to your desired library and press **Select [✓]** to begin browsing your music library.

Troubleshooting Wi-Fi Setup

If you have problems connecting to the SoundBridge to your music library via Wi-Fi, please check the following:

1. Make sure the SoundBridge is powered on (the LED screen is lit). M2000 and M500 models: Are the LED lights lit up inside the CompactFlash Wi-Fi adapter? If not, your card is not receiving power. Remove and re-insert the CF card with the label facing away from you. It should require gentle pressure to be inserted into the CF slot.
2. Is SoundBridge within range of your wireless network signal? Performance varies depending on wireless network hardware, physical barriers such as walls, and signal interference.
3. Is your computer on and your wireless access point plugged in?
4. Is your music server software running on your computer? Are your music sharing options enabled? (See "Enabling Music Sharing" on page ##.)
5. Did you enter your password correctly (if you have one), including case sensitive characters?

Visit our FAQ and User Forum at
www.rokulabs.com/support

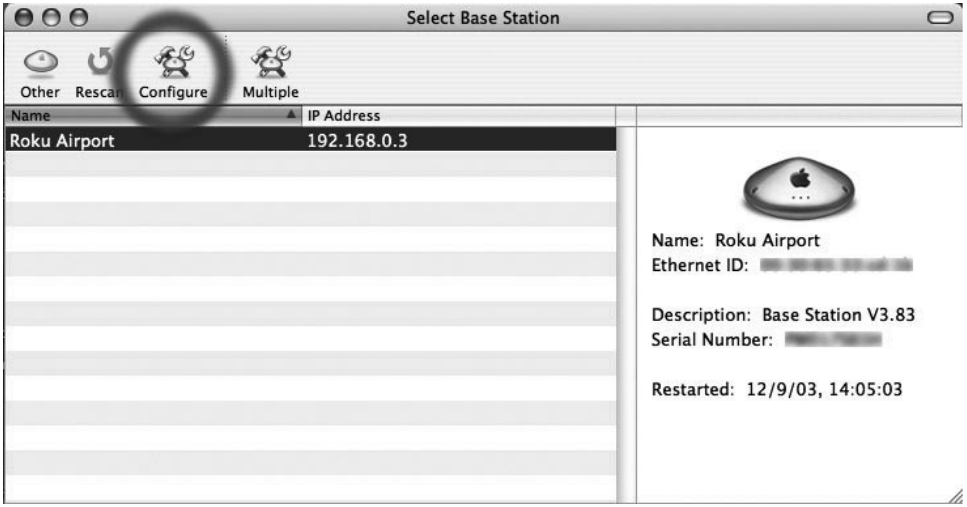
Obtaining Your Wireless Access Point's Password

Follow these instructions to determine your wireless access point password, and be sure to have a pen ready to make a note of the case-sensitive password as well as the password type, either hexadecimal (hex) or ASCII.

Wi-Fi Setup Examples

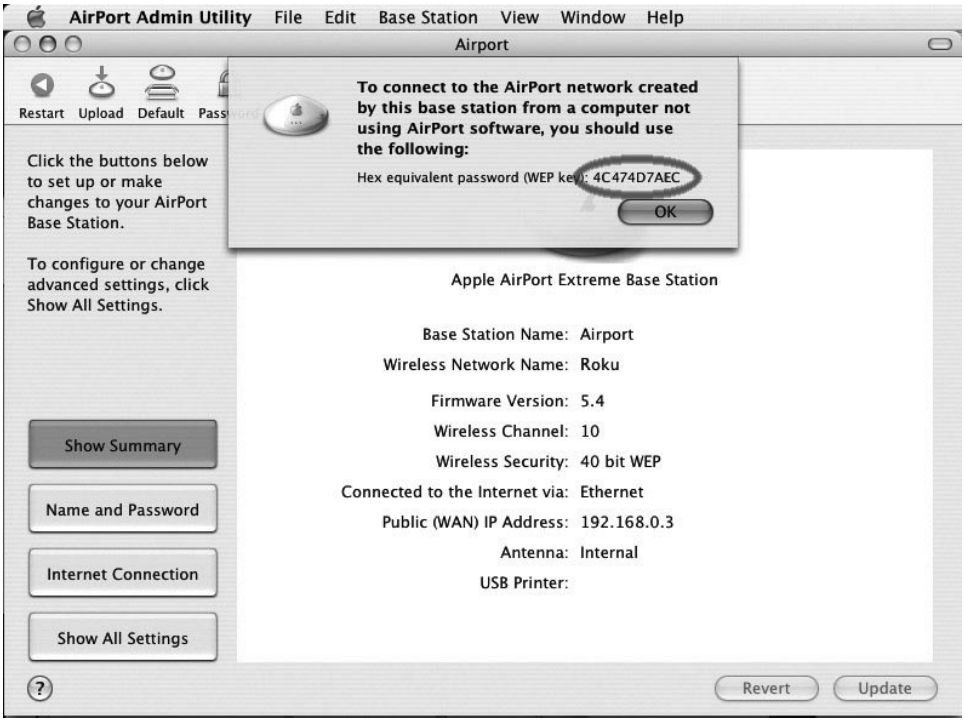
Apple AirPort (Mac Users)

The Apple Airport is a very popular access point. To see its configuration, open your AirPort Admin Utility on your Mac (it is in the Utilities folder). Select your AirPort and choose "Configure."



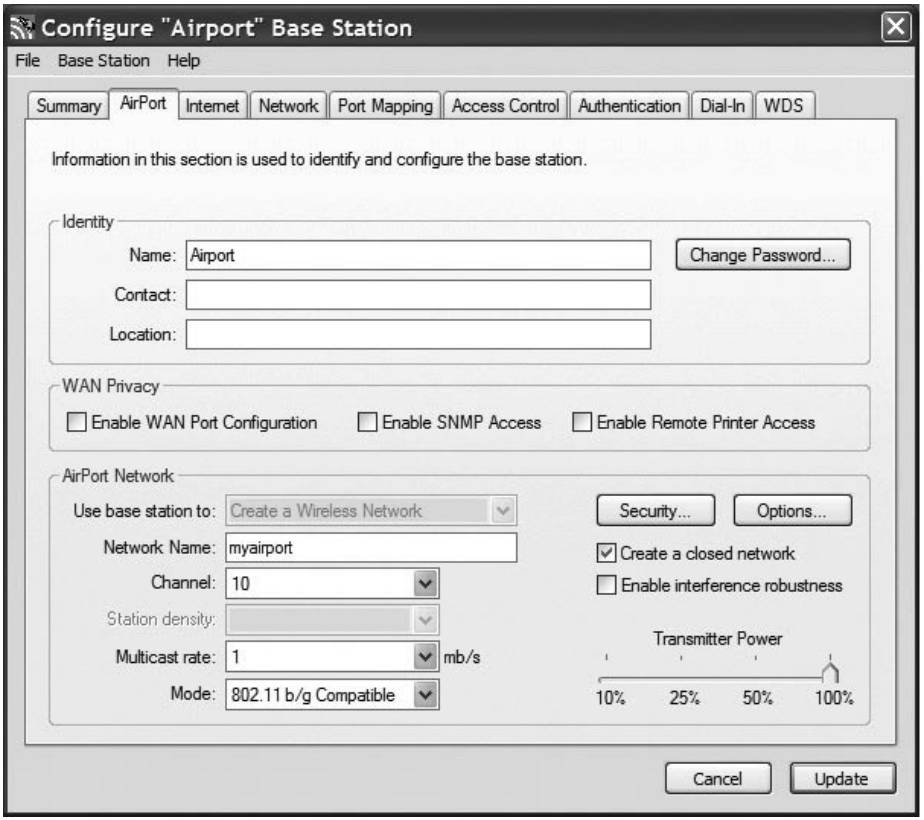
You may need to enter the password for your base station. You should then see the screen below. The line labeled “Wireless Network Name”: is the name of your network, also known as an “SSID.” You will either select this network on the SoundBridge screen or enter it manually if your network is “closed.”

If your network is password protected, you should choose “Equivalent Network Password” from the “Base Station” menu (see illustration above) and write down the value that appears in the dialog (see illustration below). This is the value you will enter into SoundBridge’s wireless setup password field. (Select password type “hex” in the SoundBridge menu.)

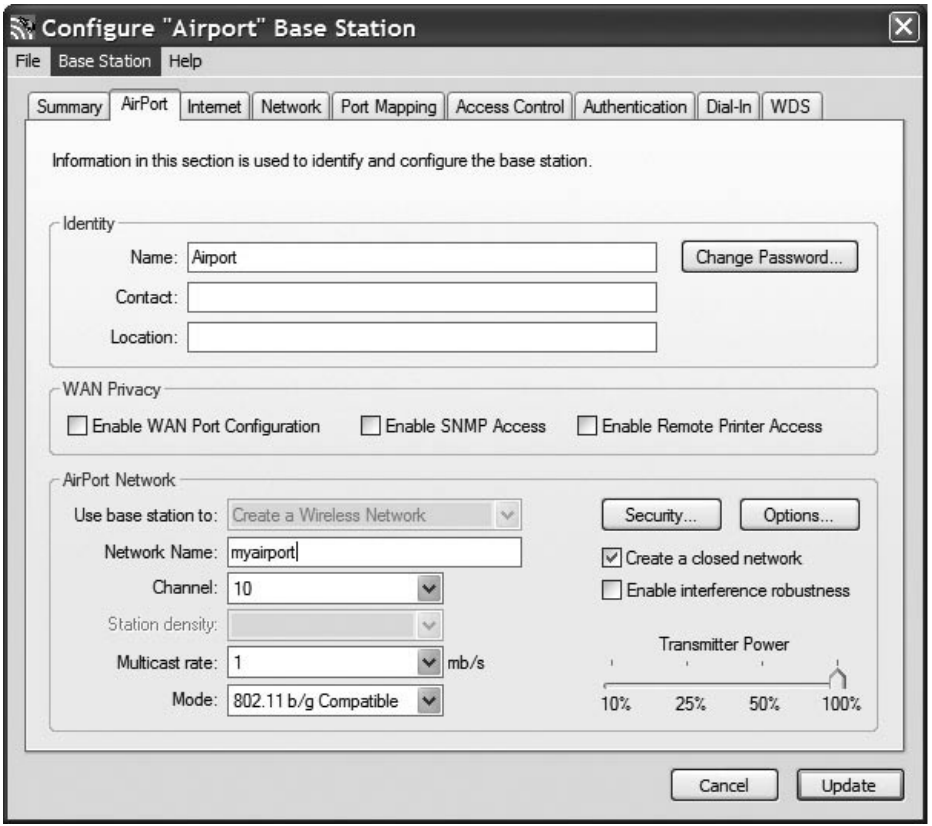


Apple AirPort (PC Users)

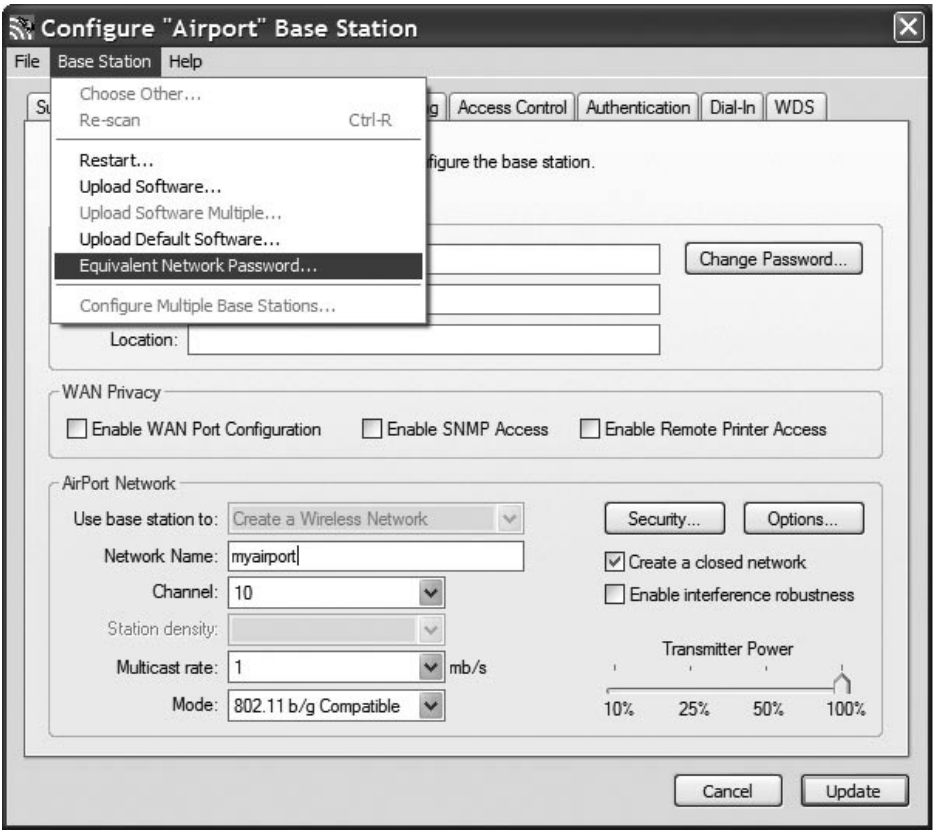
Step 1: Open the AirPort Admin utility (Start/Programs/Airport Admin Utility). Select the network you would like to configure. You should then see the configuration screen below.



Step 2: Make a note of the name of your wireless network in the “Network Name” field (see below).



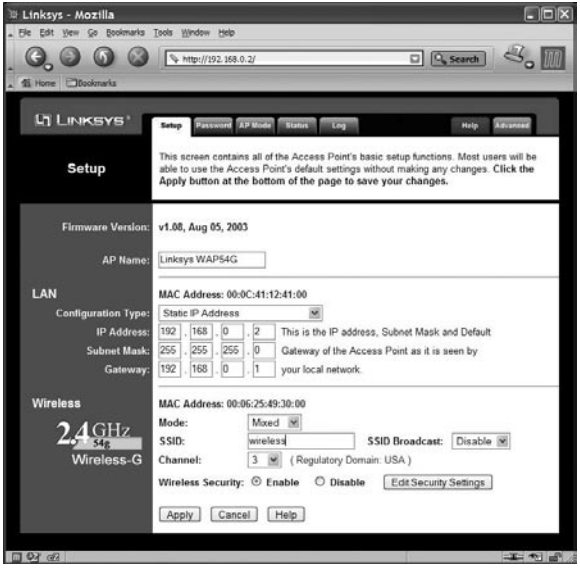
Step 3: Select the “Equivalent Network Password” from the “Base Station” drop down menu.



Step 4: Write down the displayed password(s), as well as their format ("hex" in the example below). Press OK to close the dialog box.

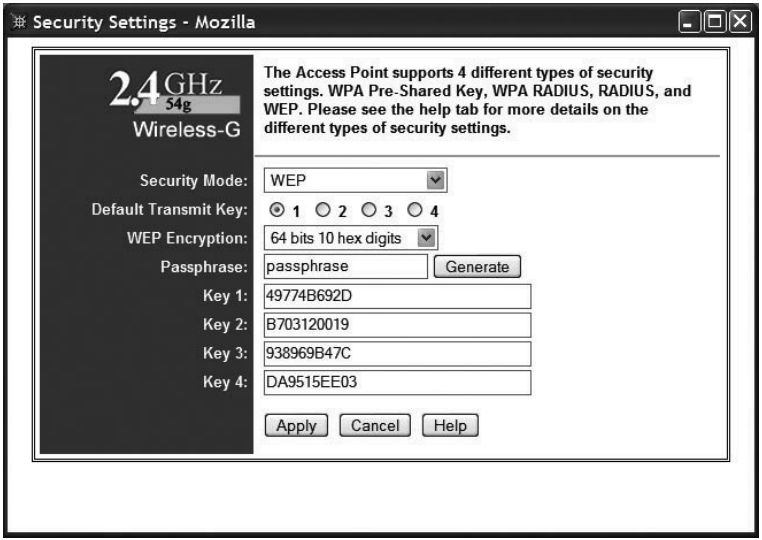
Linksys WAP54G

The Linksys WAP54G access point is a popular 802.11g access point. Getting the hexadecimal WEP key from the WAP54G is an easy process. First, open a web browser and connect to the access point. Connecting to the access point is done by entering the access point's IP address in the location bar of your web browser. If you do not know the IP address of the access point, please refer to the software or manual that came with the access point in order to determine the IP address. After successfully logging in, you will see a page similar to the following:



Make a note of the "SSID" (in this case "wireless"), this you will need to enter into the "SSID" field in SoundBridge's wireless setup.

As you can see in the next illustration, "Wireless Security" is enabled. Click on the "Edit Security Settings" button to access the WEP setup page:



This Linksys access point allows you to easily view the keys. The default key is key number 1, so make a note of the value of the "Key 1" field ("49774B692D" in this case). This is the value you will enter into SoundBridge's wireless setup's "Password" field. You now have the information necessary to configure your SoundBridge to connect to your network. You may close your web browser.

Netgear WG602

The Netgear WG602 is an 802.11g Wireless Access Point. Its configuration can be accessed with a web browser. First, open a web browser and connect to the access point by entering the access point's IP address in the location bar of your web browser. If you do not know the IP address of the access point, please refer to the software or manual that came with the access point in order to determine the IP address. After successfully logging in, you will see a page similar to the following:

The value of “Wireless Network Name (SSID)” is the SSID that you will enter into the SoundBridge’s wireless setup. Next, click on “Security Settings” on the left side to access the WEP settings:

If “WEP” is set to “Disable,” then you do not need to enter a password to access your wireless network. If “WEP” is set to “Enable,” you will need to obtain the hexadecimal key for your network. Netgear unfortunately, does not allow you to view the current passphrase or keys. However, if you re-enter the known passphrase and press “Generate Keys,” then it will regenerate the keys as before and allow you to view the keys:

Make a note of the value of the key with the active radio button (the default key, in this case “Key 1”: “562E7FF0A0”). This is the password that you will need to enter into your SoundBridge’s wireless setup “Password” field. You now have the information necessary to set up your wireless network from your SoundBridge. You may close your web browser.

Getting Help

If you are still having trouble setting up your Wi-Fi connection, please browse our web site support resources at www.rokulabs.com/support, or send email to Customer Support at support@rokulabs.com.

CUSTOMER SUPPORT

Please visit our SoundBridge Troubleshooting area at www.rokulabs.com/support for detailed troubleshooting help. You may also browse our User Forum to see if other users have posted information that pertains to your situation. Our Forum is monitored by Roku engineers and customer support staff.

APPENDICES

End User Software License Agreement

IMPORTANT — READ CAREFULLY: By using the software in your SoundBridge, you agree to be bound by the license terms and conditions below. If you do not agree to these terms and conditions, you must immediately return your SoundBridge in its original condition and packaging to the point of purchase for a refund of your purchase price (after inspection).

iTunes Disclaimer
Roku SoundBridge interfaces to iTunes using the Apple DAAP protocol, under license from Apple. This license gives apple the right to terminate the license for any reason. Roku has no control over this, and is not responsible in the unlikely event Apple does so. In this event, Roku will use commercially reasonable efforts to provide software that installs on your PC via a download that provides similar functionality, but Roku makes no representations or warranties regarding the features available in such a situation.

Roku Software License
Subject to these terms and conditions, ROKU grants you a non-exclusive license, with no right to sublicense, to execute the software included with the SoundBridge or subsequently provided to you by ROKU (together, the "Software") on your SoundBridge solely for your personal use of the intended features and functions of the SoundBridge. The license may be transferred only with the transfer of the SoundBridge on which ROKU has installed the software; any transferee will be subject to the terms and conditions of this license. This license will terminate automatically, without notice, if you fail to comply with the terms and conditions, including the restrictions, of this license.

ROKU and its licensors own and retain all proprietary rights, including all patent, copyright, trade secret, trademark and other intellectual property rights, in and to the SoundBridge Software. You acknowledge that the license granted above does not provide you with title to or ownership of the Software, but only a right of limited use under these terms and conditions. The Software embodies ROKU's trade secrets and other proprietary information and materials. Any attempt to modify, enhance, disassemble, decompile, reverse engineer or otherwise gain access to the source code to the Software, to remove or unbundle the Software from the SoundBridge, or to sublicense or distribute the Software is strictly prohibited, except as may be otherwise agreed by ROKU in writing.

Third Party License Information
Soundbridge includes AES code Copyright © 2003, Dr. Brian Gladman, Worcester, UK.

This product is protected by certain intellectual property rights of Microsoft Corporation. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft or an authorized Microsoft subsidiary.

Limited Warranty

Roku SoundBridge is covered by a one year parts and labor warranty.

Roku SoundBridge Limited Warranty

1. **Warranty.** ROKU, LLC ("ROKU") warrants your SoundBridge and any included accessories against defects in material or workmanship as follows:

   For a period of one (1) year from the date of purchase ("Warranty Period"), if ROKU determines that the SoundBridge is defective, ROKU will repair the unit or replace the unit (with either a new or rebuilt SoundBridge unit), at its option, at no charge and, if applicable, will pay the labor charges incurred by any SoundBridge authorized service facility. If the Warranty Period has expired, the customer is responsible for the payment of all labor charges and may obtain parts from ROKU authorized service facilities or a SoundBridge service center at his or her own expense.

2. **Warranty Service Process.** To obtain warranty service, you must first obtain an RMA number (Return Merchandise Authorization) from a Technical Support Representative at ROKU. A Technical Support Representative may be reached by emailing **support@rokulabs.com** or calling our toll free number for customer care (1-866-400-7658 from the US). Once an RMA number is obtained, your SoundBridge must be shipped freight prepaid, in either its original packaging or packaging affording an equal degree of protection, to the SoundBridge authorized distribution facility. If ROKU determines that the returned unit is defective, ROKU will either repair the unit or will supply, at no charge and within a reasonable period of time, a new or rebuilt SoundBridge unit in exchange for the defective unit.

   In addition, all accessories must be returned with the defective SoundBridge. A new or factory refurbished set of accessories will be furnished with the replacement SoundBridge. Failure to return any of the accessory items could result in a delay in receiving the replacement SoundBridge, and/or result in an invoice for the missing accessories.

   Important: When emailing for an RMA number, please provide the following information:

   a. model number
   b. serial number
   c. problem description

d. software version (located in System Configuration menu)
e. date of purchase
f. place of purchase (dealer or online place of purchase)
g. return shipping address (no P.O. boxes)

Note: Proof of purchase will need to be included in the return shipment in order to ensure warranty coverage. In addition, we may attempt to further troubleshoot the problem prior to issuing an RMA number. Please be prepared to provide additional information upon request.

3. **Scope of and Limitation on Warranty.** The warranty on this product is limited to the repair or replacement of defective units as described in Section 1 above. This warranty does not cover customer training or education, installation, set up adjustments or signal reception problems. This warranty does not cover damage due to acts of God, accident, misuse, abuse, negligence, commercial use or modification of, or to any part of, your SoundBridge. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply or attempted repair by anyone other than a facility authorized by ROKU to service your SoundBridge. This warranty does not cover consumables (such as fuses and batteries). This warranty is valid only in the country of purchase from an authorized ROKU distributor or dealer. This warranty is invalid if the factory-applied serial number and/or "Warranty Void if Removed" sticker has been altered or removed from the SoundBridge.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. ROKU SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, ARISING OUT OF OR RELATED TO THIS PRODUCT OR ITS PURCHASE OR USE. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

THE SOUNDBRIDGE INCLUDES SOFTWARE PROVIDED BY THIRD PARTIES. ROKU'S WARRANTY DOES NOT APPLY TO THIRD PARTY SOFTWARE, AND ROKU IS NOT RESPONSIBLE FOR THIRD PARTY SOFTWARE. ADDITIONAL TERMS AND CONDITIONS, INCLUDING DISCLAIMERS OF WARRANTY, FOR THIRD PARTY SOFTWARE CAN BE FOUND ELSEWHERE IN THE PRODUCT DOCUMENTATION.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

FCC Warnings and Safety Information

Communication Regulation & Safety Information

FCC Compliance
This section describes the requirements for compliance with Federal Communications Commission (FCC) Rules.

FCC Registration and Requirements
The following paragraphs describe requirements and information based on FCC rules.

FCC Rules, Part 15
This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and receiver;
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected;
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Responsible party (contact for FCC matters only): Roku, LLC, 399 Sherman Ave. #12, Palo Alto, CA 94306, 650-321-1394. For customer service questions go to: http://www.rokulabs.com/support.

CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Canada Class B Statement
This Class B device meets all requirements of the Canadian interference-causing equipment regulations. Cet appareil numérique de la Class B respecte toutes les exigences du Réglement sur le materiel brouilleur du Canada.

VCCI Class B Statement

この装置は，情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＢ情報技術装置です。この装置は，家庭環境で使用することを目的としていますが，この装置がラジオやテレビジョン受信機に近接して使用されると，受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Safety

Important Safety Instructions

1. **Read Instructions.** All the safety and operating instructions should be read before the product is operated.
2. **Retain Instructions.** The safety and operating instructions should be retained for future reference.
3. **Heed Warnings.** All warnings on the product and in the operating instructions should be adhered to.
4. **Follow Instructions.** All operating and use instructions should be followed.
5. **Cleaning.** Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. **Water and Moisture.** To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus. Do not use this product near water for example, near a bathtub, wash bowl, kitchen sink or laundry tub; in a wet basement; or near a swimming pool; and the like.
7. **Accessories.** Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. A product and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the product and cart combination to overturn.
8. **Power Sources.** This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to

operate from battery power, or other sources, refer to the operating instructions.

9. **Grounding or Polarization.** This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
10. **Power Cord Protection.** Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit from the product.
11. **Overloading.** Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.
12. **Object and Liquid Entry.** Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
13. **Servicing.** Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
14. **Damage Requiring Service.** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    - When the power-supply cord or plug is damaged,
    - If liquid has been spilled or objects have fallen into the product,
    - If the product has been exposed to rain or water,
    - If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation,
    - If the product has been dropped or damaged in any way, and
    - When the product exhibits a distinct change in performance, this indicates a need for service.
15. **Heat.** The product should be situated away from heat sources such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat.

User/Installer Caution
Your authority to operate this FCC certified equipment could be voided if you make changes or modifications not expressly approved by the manufacturer, who is responsible for compliance with Part 15 FCC rules.

European Community

Complies with EU Directive 89/336/EEC using EN55022:1998, EN55024:1998, EN61000-3-2:2000 and EN61000-3-3:1995.

CE Warning: This is a class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

TECHNICAL SPECIFICATIONS

Dimensions and Display Specifications

M500	M1000	M2000
Dimensions: 10" wide x 2.37" diameter Weight: 1.5 lbs Graphical Display: 40-x-2-character LCD	Dimensions: 10" wide x 2.37" diameter Weight: 1.5 lbs Graphical Display: 280-x-16-pixel VFD	Dimensions: 17" wide x 275" diameter Weight: 2.75 lbs Graphical Display: 512-x-32-pixel VFD

Cable Management

M2000 and M500: All cable connections are under the removable end caps and cables exit through an opening at the back of the end cap

M1000: All cable connections plug in to the back of the unit

Audio Specifications

M500	M1000	M2000
Outputs: Goldplated line-level RCA Digital TOSlink Optical Digital S/PDIF Coax	Outputs: Line-level 1/8" (3.5mm) Digital TOSlink Optical Digital S/PDIF Coax	Outputs: Goldplated line-level RCA Digital TOSlink Optical Digital S/PDIF Coax
Digital/Analog Converter: 24-bit DAC	Digital/Analog Converter: 20-bit DAC	Digital/Analog Converter: 24-bit DAC
Maximum Line Output: 3.44 Volts peak-to-peak	Maximum Line Output: 2.83 Volts peak-to-peak	Maximum Line Output: 3.44 Volts peak-to-peak
THD: -93dB typical	THD: -90dB typical	THD: -93dB typical
Dynamic Range: 96dB typical	Dynamic Range: 90dB typical	Dynamic Range: 96dB typical

Signal to Noise Ratio: 96dB

Frequency Response: <20Hz - >20kHz

5.1 Surround Sound supported through Digital Audio outputs for DTS and Dolby Digital source files

Audio Format Support
MP3, AAC, WMA, DRM WMA, WAV, AIFF, LPCM, Rhapsody music files (WMA Lossless supported only when using Windows Media Connect, which transcodes to LPCM; Apple Lossless, FLAC, Ogg-Vorbis supported with optional third-party software; Protected AAC files purchased from the iTunes Music Store are not supported)

Sample Rates Supported (kHz)
8.0, 11.025, 12.0, 16.0, 22.05, 24, 32, 44.1, 48.0

Bit Depth Supported
8 bit, 16 bit, stereo or mono

Network Connections

M500	M1000	M2000
Ethernet: 10BaseT RJ-45 CompactFlash Slot for 802.11b Wi-Fi adapter (included)	Ethernet: 100BaseT RJ-45 Built-in 802.11b Wi-Fi support	Ethernet: 10BaseT RJ-45 CompactFlash Slot for 802.11b Wi-Fi adapter (included)

Protocols Supported
Bonjour™ (formerly known as Apple Rendezvous)
TCP, DAAP, AutoIP, HTTP, UPnP AV, Windows Media DRM 10, others
SlimServer Open Source 5.x-based streaming and control protocols

Power Supply

M500	M1000	M2000
Switching 110/200V power supply	110V or 220V power supply (regional)	Switching 110/220V power supply
Input: 100–240V: 50/60 KHz	Input: 100 or 240V (depending on region): 50/60 KHz	Input: 100–240V: 50/60 KHz
Output: 9V, 1.3 amp	Output: 5V, 1.3 amp	Output: 24V, .75 amp

Windows® System Requirements
iTunes users: WindowsXP or 2000
Windows Media Connect users: Windows XP with Service Pack 2
Musicmatch users: Windows 98 SE/Me/XP 2000 (SP3 or above)
Rhapsody users: Windows 98 or later
SlimServer users: Windows 98, ME, 2000, XP, NT
500MHz Pentium class processor or better
128MB RAM minimum / 256MB RAM recommended

Macintosh System Requirements
iTunes users: Mac OS X v 10.1.5 or later; iTunes v4.0 or later
400MHz G3 processor or better
128MB RAM minimum / 256RAM recommended

Other Requirements
Computer with network connection

Optional Accessories
SoundBridge Mounting Kit — includes mounting brackets for wall and under-shelf mounting
Additional Roku Remote Control

Third-Party Accessories
Powered Speakers

SoundBridge Mounting Kit
Easily mount your SoundBridge on a wall or beneath a cabinet with concealed hardware that highlights SoundBridge's sleek design.

Buy it at **www.rokulabs.com/buy**

$29.99

Need help? Go to
www.rokulabs.com/support

© 2005 Roku, LLC. All rights reserved. ROKU, the ROKU logo, and SoundBridge are trademarks or registered trademarks of Roku, LLC in the United States and other countries. All other trademark are trademarks or registered trademarks of their respective owners.

Software v 2.3 | revised July 22, 2005

ROKU™

www.rokulabs.com

05-SB00-UG0722